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ABSTRACT

Investigating the relationship between students' daily attendance and mathematics classroom performance, the study was conducted using 23 American Indian adult students enrolled in Remedial Mathematics 100 at the Southwestern Indian Polytechnic Institute from September 1981 through November 1981. Classroom attendance was recorded on a daily basis for 11 weeks with 50 being the maximum number of daily classes. The mathematics performance was based on a series of seven criterion referenced tests, reviewed and revised to comply with specific course requirements and used in conjunction with the "Contempo Lab - Math Skills Program." Results of the study showed a statistically significant correlation ($P<.05$) between the variables of attendance and performance. Regression equations for predictive purposes appeared most appropriate, therefore by using attendance as the predictor variable and performance as the criterion variable instructors could predict an individual student's performance based upon attendance. Replication studies are recommended to determine if correlation is consistent within other ethnological samples. (ERB)

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The Relationship Between Attendance and Performance in a Remedial Mathematics Program with American Indian Adults

Inherent in the thinking of instructors is the notion that daily classroom attendance is intregal to successful classroom performance. The purpose of this study was to investigate the relationship between students' daily attendance and mathematics classroom performance within the confines of a remedial mathematics program for American Indian adults.

Mathematics performance for this study was based upon a series of seven criterion referenced tests, produced by Career Research Associates, (1979), which are used in conjunction with the "Contempo Lab - Math Skills Program," the foundation of the course content. Each of these tests was reviewed and revised by classroom instructors to comply with the specific course requirements of Remedial Mathematics 100. The total number of test questions was 140.

Classroom attendance was recorded on a daily basis for eleven weeks commencing 9/7/81 and concluding 11/20/81. The maximum number of daily classes was 50.

The sample for this study were students attending the Southwestern Indian Polytechnic Institute (SIPI) in Albuquerque, New Mexico. SIPI is a post-secondary school with a curricula emphasis on technical-vocational subjects. The students are all Native American and represent approximately 85 recognized tribes. The sample size was 23 and included 17 females and 6 males. The ages of the sample ranged from 18 to 23. These students were enrolled in Remedial Mathematics 100 from September 1981 through November 1981.

Entrance into Remedial Mathematics 100 is determined through the use of a diagnostic standardized test presented to the students upon entering SIPI. The Stanford Diagnostic Mathematics Test is used and Remedial Mathematics 100 is assigned to those students who score below 6.0 grade equivalence on this instrument.

Results of this study showed a statistically significant correlation ($P<.05$) between the variables of attendance and performance. The Pearson Product Moment Correlation yielded a positive correlation of .49 providing a coefficent of determination of .24. A F test was used to test the statistical significance of the correlation. The calculated F was 6.67, the critical F was 4.32, allowing the statistical significance to be upheld at the .05 level.

Due to the positive correlation of this study regression equations for predictive purposes would appear most appropriate. Using attendance as the predictor variable and performance as the criterion variable instructors could predict an individual student's performance based upon attendance.

The purpose of this study was to investigate the relationship between attendance and performance using American Indian adults. Based upon the evidence a positive correlation was determined. Considering the selective nature of the sample the author urges replication studies to determine if this correlation is consistant within other ethnological samples.

Table 1

Descriptive Statistics and Correlation Between Performance and Attendance (N=23)

Variable	Mean	SD	r	r^2	F
Performance	103.56	15.39	.49	.24	6.67
Attendance	43.39	2.51			

F .05 (1,21 df) = 4.32

P < .05